AN INDEX TO "A CLASSIFICATION OF THE AMERICAN OPERCULATE LAND MOLLUSKS OF THE FAMILY ANNULARIIDÆ". By John B. Henderson and Paul Bartsch, Proc. U.S. Nat. Mus., 1920, vol. lviii, p. 49.

Compiled by Hugh C. Fulton.

Read 12th January, 1923.

This new family is separated from the Cyclostomatidæ on account of "a constant and essential radula difference", the sub-families are founded on "characters presented by the operculum", the new genera "upon minor modifications of the opercular characters", and the sub-genera "almost wholly upon shell characters". "The comparatively few species, the opercula of which we have not actually seen, are excluded from consideration."

Arrangement of this index:—a synopsis is given first of the sub-families, genera, etc., in the order in which they appear in the above paper, the type species being placed in parentheses; this is followed by an alphabetical list of the species with numbers referring to the genera to which they are attached by the above authors. Many species that have formerly been erroneously attributed by Pfeiffer and other authors to Gundlach, Arango, etc., are in this paper accredited to their proper authorities.

Fam. ANNULARIIDÆ, Henderson & Bartsch, 1920. Sub-family CHONDROPOMINÆ, H. & B., 1920.

> Type Genus Chondropoma. Genus Chondropoma, Pf., 1847.

1. Sub-genus Chondropoma, Pf., 1847. (semilabre, Pf.)

2. ,, CHONDROPOMATUS, H. & B., 1920. (latum, Pf.)

3. ,, CHONDROPOMIUM, H. & B., 1920. (weinlandi, Pf.) 4. ,, CHONDROPOMETES, H. & B., 1920. (vignalensis, Pf.)

5. , CHONDROPOMARTES, H. & B., 1920. (presasiana, Pf.)

6. ,, CHONDROPOMORUS, H. & B., 1920. (dentatum, Say)

Genus Chondrothyra, H. & B., 1920.

- 7. Sub-genus Chondrothyra, H. & B., 1920. (egregium, Poey.)
- 8. ,, CHONDROTHYRIUM, H. & B., 1920. (violaceum, Pf.)
- 9. ,, CHONDROTHYROMA, H. & B., 1920. (sagebieni, Pf.) 10. ,, CHONDROTHYRETES, H. & B., 1920. (shuttleworthi,
- 10. ,, CHONDROTHYRETES, H. & B., 1920. (shuttleworthi, Pf.)

Sub-family RHYTIDOPOMINÆ, H. & B., 1920.

Type Genus Rhytidopoma, Sykes.

- 10* Genus Rhytidothyra, H. & B., 1920. (bilabiatum, Orb.) Genus Parachondria, Dall., 1905.
- 11. Sub-genus parachondrisca, H. & B., 1920. (umbricola, Weinl.)
- 12. ,, PARACHONDRELLA, H. & B., 1920. (fecunda, Ad.)
- 13. ,, PARACHONDRIA, Dall, 1905. (fascia, Wood.)
- 14. ,, PARACHONDROPS, H. & B., 1920. (campbelli, C. B. Ad.)

Genus	OPISTHOSIPHON,	Dall,	1905.

- 15. Sub-genus opisthosiphon, H. & B., 1920. (bahamense, Shutt.)
- 16. ,, OPISTHOSIPHONA, H. & B., 1920. (moreletiana, Petit.)
- 17. Genus Xenopoma, Crosse, 1890. (hystryx, Pf.)
- 18. Genus Rhytidopoma, Sykes, 1901. (rugulosum, Pf.)

Genus Torellia, H. & B., 1920.

19. Sub-genus Torellia, H. & B., 1920. (torreianum, Arango.)

20. ,, TORELLISCA, H. & B., 1920. (simpsoni, H. & B.)

Sub-family ADAMSIELLINÆ, H. & B., 1920.

Type Genus Adamsiella, Pf.

Genus Adamsiella, Pf.

21. Sub-genus Adamsiella, Pf., 1851. (mirabilis, Wood.)

22. ,, ADAMSEILLOPS, H. & B., 1920.

Sub-family ANNULARINÆ, H. & B., 1920. Type Genus Annularia, Schum.

Genus Annularia, Schumacher, 1817.

- 23. Sub-genus annularia, Schum., 1817. (lincina, Linné.)
- 24. ,, ANNULARISCA, H. & B., 1920. (eburneum, Pf.)
- 25. ,, ANNULAROSA, H. & B., 1920. (fragilis, Pf.)
- 26. ,, ANNULARITA, H. & B., 1920. (majusculum, Morelet.)
 27. ,, ANNULARELLA, H. & B., 1920. (yunquense, Pf.)
- 27. ,, ANNULARELLA, H. & B., 1920. (yunquense, F1.) 28. ,, ANNULAROPS, H. & B., 1920. (blaini, Pf.)
- 29. ,, ANNULARODES, H. & B., 1920. (uncinnatum, Arango.)
- 30. Genus Blaesospira, Crosse, 1890. (echinus, Pf.)
- 31. Genus Abbotella, H. & B., 1920. (moreletiana, Crosse.)

Genus Tudora, Gray, 1850.

- 32. Sub-genus TUDORA, Gray, 1850. (megacheilos, Pot. & Mich.)
- 33. ,, TUDORELLATA, H. & B., 1920. (interstitialis, Pf.)
- 34. ,, Colobostylus, Crosse & Fischer, 1888. (jayanum, C. B. Ad.)
- 35. ,, TUDORISCA, H. & B. (albus, Sow.)
- 36. ,, TUDOROPS, H. & B., 1920. (banksianum, Sow.)
 Genus Eutudora, H. & B., 1920.
- 37. Sub-genus EUTUDORA, H. & B., 1920. (limbifera, Pf.)
- 38. ,, EUTUDORISCA, H. & B., 1920. (jimenoi, Pf.)
- 39. ,, EUTUDORELLA, H. & B., 1920. (agassizii, Pf.)
- 40. ,, EUTUDOROPS, H. & B., 1920. (torquatum, Poey.)
- 41. Genus Ramsdenia, Preston, 1913. (mirifica, Prest.)

Genus DIPLOPOMA, Pf., 1859.

- 42. Sub-genus diplopoma, Pf., 1859. (architectonicum, Pf.)
- 43. ,, JAMAICIA, C. B. Ad., 1850. (anomala, C. B. Ad.)

	LIST OF SPECIES.				
32.	abboti, Hend. & Bartsch.	14.	campbelli, C. B. Ad.		
	abnatum, Pf.	13.	capillacea, Pf.		
	adamsi, Pf.	1.	carenasense, Pils. & Hir.		
	adolfi, Pf.		,, v. guantana-		
	adulteratum, Pf.	•	mensis, Torre.		
	agassizii, Pf.	1.	caribbeum, Clapp.		
	alatum, Pf.	6.	caricæ, Pf.		
35.		38.	catenata, Gould.		
	" var. fuscus, C. B. Ad.	34.	chevalieri, C. B. Ad.		
3.	ambigua, Lamk.		", v. virgatum, C. B. Ad.		
	aminensis, Pf.		" v. pulchrius, C. B. Ad		
	andrewsæ, Ancey.	35.	chiapensis, Crosse.		
	anomala, C. B. Ad.	23.	chittyi, C. B. Ad.		
	antiguense, Shutt.	6.	chordata, Pf.		
16.	apertus, Torre & Hend.	13.	cinclidodes, Pf.		
	arangiana, Gundl.		clathratum, Gould.		
42.	architectonicum, Pf.		claudicans, Pf.		
	aripensis, Guppy.		columna, Wood.		
12.	armata, Ć. B. Ad.		coronatum, Poey.		
10.	assimile, Pf.		crenulatum, Fér.		
13.	augustiæ, C. B. Ad.		crenulosus, C. B. Ad.		
33.	auricomum, Pf.		cumulata, Pf.		
	avena, C. B. Ad.		dalli, Torre & Hend.		
	azucarensis, Hend. & Bart.		deceptor, Arango.		
15.	bahamense, Shutt.		decoloratum, Gundl.		
	banksianum, Sow.		decussatum, Lamk.		
	basicarinatum, Pf.		deficiens, Gundl.		
	bebini, Pf.		delatreanum, Orb.		
16.	berryi, Clapp.	6.	dentatum, Say.		
	,, v. semiapertus, Torre		dentilobatum, Weinl.		
	& Hend.	16.	detectus, Torre & Hend.		
27.	bertini, Maltz.	6.	dilatatum, Pf.		
	" v. gracillima, Maltz.	5.	discolorans, Wright.		
6.	biforme, Pf.	1.	dissolutum, Poey.		
	bilabiatum, Orb.	5.	dunkeri, Arango.		
	bioscai, Torre & Hend.		eburneum, Gundl.		
2 8.	blaini, Pf.		echinatum, Pf.		
	blandi, Weinl.		echinulatum, Pf.		
	blandum, Pf.		echinus, Wright.		
	blauneri, Pf.	7.	egregium, Poey.		
	bronni, C. B. Ad.		emilianum, Weinl.		
1.	brownianum, Weinl.	36.	enode, Pf.		
	bryanti, Pf.	6.	erectum, Pf.		
41.	bufo, Pf.	1.	ernesti, Pf.		
7.	canaliculatum, Gundl.	3.	eusarcum, Pf.		
	candeanum, Orb.	10.	excisum, Pf.		
6.	canescens, Pf.	16.	excurrens, Pf.		

13. fascia, Wood.

v. proxima, C. B. Ad.

12. fecunda, C. B. Ad.

" v. distincta, C. B. Ad.

23. fimbriatulum, Sow.

,, v. docens, C. B. Ad.

,, v. albinodatum, C. B.

10. foveatum, Pf.

25. fragile, Pf.

14. fraterminor, Pils. & Brown.

31. gabbi, Crosse.

1. garceanum, Torre.

36. garridoianum, Pf.

13. gonavicola, Hend. & Bartsch.

21. grayana, Pf.

, v. aureolabre, Simpson.

1. gruneri, Pf.

3. gutierezi, Pf.

32. habichi, Weinl. 7. hamlini, Arango.

7. hendersoni, Torre.

6. hemioptum, Pf.

33. heynemani, Pf.

23. hillianum, C. B. Ad.

,, v. amandum, C. B. Ad.

, v. aculeosum, C. B. Ad.

v. leporilabre, C. B. Ad.

1. hjalmersoni, Pf.

18. honestum, Poey.

13. hydii, Weinl. 17. humboldtiana, Pf.

34. humphreysianum, Pf.

17. hystryx, Pf. 1. igneum, Rve.

22. ignilabre, C. B. Ad.

23. illustris, Poey.

19. immersum, Gundl.

23. inculta, Poey.

21. intermedia, C. B. Ad.

35. interruptum, Lamk.

33. interstitialis, Pf.

21. irorrata, Gloyne.

1. irradians, Shutt.

21. jarvisi, Hend.

34. jayanum, C. B. Ad.

,, v. rufilabre, C. B. Ad.

jayanum v. nigrolabre, C. B. Ad.

14. jeannereti, Pf.

23. jiguanensis, Pf.

38. jimenoi, Pf.

16. judacensis, Torre & Hend.

1. julieni, Pf.

1. kisslingianum, Weinl.

32. kobelti, Maltz.

32. labeo, Müll. 23. lachneri, Pf.

1. lætum, Poey.

35. lamellosum, C. B. Ad.

23. largillierti, Pf.

4. latilabre, Orb.

2. latum, Pf.

23. lima, C. B. Ad.

" v. blandiana, C. B. Ad.

23. lincina, Linné.

23. lincinellum, Lamk.

3. lindeniana, Weinl.

6. litturatum, Pf.

3. loweana, Pf.

22. lugubris, Pf.

14. lurida, Pf.

33. mackinlayi, Pf.3. magnifica, Pf.

26. majusculum, Morelet.

1. marginalbum, Pf.

12. maritima, C. B. Ad. ,, v. aurora, C. B. Ad.

33. mayensis, Torre & Rams.

32. megacheilos, Pot. & Mich.

23. minium, Gundl.

21. mirabilis, Wood.

21. miranda, C. B. Ad.

41. mirifica, Preston. 23. mite, C. B. Ad.

1. mæstum, Pf.

21. monstrorsa, C. B. Ad.

23. mordax, C. B. Ad.

31. moreletiana, Crosse.

16. moreletiana, Petit.

21. moribunda, C. B. Ad.

42. moussonianum, C. B. Ad.

1. navassense, Tryon.

6. neglectum, Pf.

35. nelsoni, Clapp. 31. newcombi, Crosse. 6. newcombianum, C. B. Ad. 6. newtoni, Shutt. 14. nigriculum, Pf. 3. nobilis, Pf. 41. nobilitatum, Poey. 18. nodiferum, Arango. 18. nodulatum, Poey. 1. obesum, Menke. 16. obtectus, Torre & Hend. 16. obturatus, Torre & Hend. 22. occidentale, Pf. 16. occultus, Torre & Hend. 4. ottonis, Pf. 1. oxytremum, Pf. 3. papyracea, C. B. Ad. 16. paredonensis, Torre & Hend. 21. pearmaneanum, Chitty. 7. percrassa, Pf. 1. perlatum, Gundl. 23. perplicatum, Gundl. 41. perspectivum, Pf. 6. petitianum, Pf. 1. pfeifferianum, Poey. 1. pictum, Pf. 23. pisum, C. B. Ad. 3. plicatulum, Pf. 1. poeyanum, Orb. 5. presasiana, Pf. 30. pretrei, Orb. 16. protractus, Torre & Hend. 27. pseudalatum, Torre. 21. pulchrius, C. B. Ad. 23. pulchrum, Wood. 36. pulverulentus, Pf. 13. pupæformis, Sow. 16. pupoides, Morelet. 33. putre, Pf. 13. quaternata, Lk. 42. radiosum, Morelet. 33. ramsdeni, Pils. & Hend. 32. rangelinum, Poey. 1. raveni, Crosse. 6. rawsoni, Pf. 35: rectus, Pf.

36. redfieldianum, C. B. Ad.

redfieldianum v. concentrica, C. B. Ad. 32. reeveana, Pf. 42. retrorsus, C. B. Ad. 6. revinctum, Poey. 1. revocatum, Gundl. 33. roemeri, Pf. 32. rollei, Maltz. 1. rollei, Weinl. 31. rosaliae, Pf. 36. rotundatum, Poey. 3. rubicundum, Morelet. 1. rufilabre, Beck. 5. rufopictum, Pf. 6. rüsei, Pf. 9. sagebieni, Poey. 6. salleanum, Pf. 16. salustii, Torre & Hend. 6. santacruzense, Pf. 23. sauliæ, Sow. 28. sauvallei, Pf. 23. scabriusculum, C. B. Ad. " v. amabile, C. B. Ad. 5. scobina, Pf. 15. sculptum, Pf. 41. semicoronatum, Pf. 1. semilabre, Pf. 23. senticosum, Smith. 10. sericatum, Morelet. 1. serraticosta, Weinl. 14. sheppardiana, C. B. Ad. 10. shuttleworthi, Pf. v. gundlachi, Arango. v. incrassatum, Wright. 1. simillina, Vendreyes. 1. simplex, Pf. 20. simpsoni, Hend. & Bartsch. 13. simulans, C. B. Ad. 10. sinuosum, Wright. 1. solidulum, Gundl. " v. tanamensis, Torre. 31. solutum, Pf.

28. sordidum, Poey.

23. sulculosum, Fér.

16. subobturatus, Torre & Hend.

6. subreticulatus, Maltz.

23. storchi, Pf.

1. swifti, Shutt.

35. tamsiana, Pf.

13. tappaniana, C. B. Ad.

35. tectilabris, C. B. Ad. 10. tenebrosum, Morelet.

1. tenuilirata, Pf.

36. tenuistriata, C. B. Ad.

31. tentorium, Pf. 6. textum, Pf.

34. thysanorhaphe, Sow.

41. tolleni, Ramsden.

40. torquatum, Poey.

42. torrei, Ramsden. 19. torreiana, Arango.

6. tortolense, Pf.

23. tractum, Gundl.

16. trincheracensis, Torre & Hend.

23. trochlearis, Pf.

36. troscheli, Pf.

28. tryoni, Arango.

11. umbricola, Weinl.

29. uncinatum, Arango.

36. undosum, Pf.

10. unilabiatum, Pf.21. variabilis, C. B. Ad.

32. versicolor, Pf.

vignalensis, Pf.
 violaceum, Pf.

6. watlingensis, Dall.

3. weinlandi, Pf.

" v. superba, Hend. & Simp.

1. wilcoxi, Pils. & Hend.

31. wilhelmi, Pf.

14. wilkinsoni, C. B. Ad.

18. wrightianum, Arango.

36. xanthostoma, Sow.

36. yallahensis, C. B. Ad.

33. yateracensis, Pf.

yucayum, Presas.
 yunquense, Pf.